What Is Claimed Is:

1. A DNA molecule comprising a coding sequence for a mutant protein, wherein said mutant protein is a mutant DNA polymerase selected from the group consisting of: *E. coli* DNA polymerase I, Klenow fragment of *E. coli* DNA polymerase I, *Streptococcus pneumoniae* polymerase, *Thermus aquaticus* polymerase, *Thermus flavus* polymerase, *Thermus thermophilus* polymerase, *Deinococcus radiodurans* polymerase, *Bacillus caldotenax* polymerase, *E. coli* bacteriophage T5 polymerase, mycobacteriophage L5 polymerase, *Thermatoga maritima* polymerase, and *E. coli* bacteriophage SP01 polymerase, and

wherein said mutant DNA polymerase comprises a substitution of Tyr for Phe at a position in said polymerase corresponding to Phe_{570} of wild-type T5 polymerase.

2. The DNA molecule of claim 1, further comprising a promoter, wherein said promoter is in a position and orientation with respect to the coding sequence such that the mutant protein may be expressed in a cell under the control of said promoter.

3. The molecule of claim 2, wherein said coding sequence is heterologous to said promoter.

4. A host cell comprising the DNA molecule of claim 1.

5. The host cell of claim 4, wherein said host cell is *E. coli*.

6. A method for producing a protein, wherein said protein is a mutant DNA polymerase selected from the group consisting of: *E. coli* DNA polymerase

I, Klenow fragment of *E. coli* DNA poymerase I, *Streptococcus pneumoniae* polymerase, *Thermus aquaticus* polymerase, *Thermus flavus* polymerase, *Thermus thermophilus* polymerase, *Deinococcus radiodurans* polymerase, *Bacillus caldotenax* polymerase, *E. coli* bacteriophage T5 polymerase, mycobacteriophage L5 polymerase, Thermatoga maritima polymerase, and *E. coli* bacteriophage SP01 polymerase, comprising a substitution of Tyr for Phe at a position in said polymerase corresponding to Phe_{570} of wild-type T5 polymerase, said method comprising:

(a) culturing a host cell comprising the DNA molecule of claim 2, and

(b) isolating said protein from said host cell.

7. A mutant DNA polymerase selected from the group consisting of a mutant of: *E. coli* DNA polymerase I, Klenow fragment of *E. coli* DNA polymerase I, *Streptococcus pneumoniae* polymerase, *Thermus aquaticus* polymerase, *Thermus flavus* polymerase, *Thermus thermophilus* polymerase, *Deinococcus radiodurans* polymerase, *Bacillus caldotenax* polymerase, *E. coli* bacteriophage T5 polymerase, *Thermatoga maritima* polymerase, mycobacteriophage L5 polymerase, and *E. coli* bacteriophage SP01 polymerase,

wherein said mutant DNA polymerase comprises a substitution of Tyr for Phe at a position in said polymerase corresponding to Phe_{570} of wild-type T5 polymerase.

8. A DNA molecule as claimed in claim 1, wherein said mutant protein is a mutant T5 DNA polymerase comprising a substitution of Tyr for Phe_{570} of wild-type T5 polymerase.

9. The DNA molecule of claim 8, further comprising a promoter, wherein said promoter is in a position and orientation with respect to the coding

sequence such that the mutant protein may be expressed in a cell under the control of said promoter.

10. The molecule of claim 8, wherein said coding sequence is heterologous to the promoter.

11. A host cell comprising the DNA molecule of claim 8.

12. The host cell of claim 11, wherein said host cell is *E. coli*.

13. A method for producing a protein, wherein said protein is a mutant T5 DNA polymerase comprising a substitution of Tyr for Phe_{570} of wild-type T5 polymerase, said method comprising:

(a) culturing a host cell comprising the DNA molecule of claim 9, and

(b) isolating said protein from said host cell.

14. A mutant DNA polymerase as claimed in claim 7, wherein said mutant DNA polymerase is a mutant T5 DNA polymerase comprising a substitution of Tyr for Phe_{570} of wild-type T5 DNA polymerase.

15. A DNA molecule as claimed in claim 1, wherein said mutant protein is a mutant Taq DNA polymerase comprising a substitution of Tyr for Phe_{667} of wild-type Taq polymerase.

16. The DNA molecule of claim ~~15~~ 7, further comprising a promoter, wherein said promoter is in a position and orientation with respect to the coding sequence such that the mutant protein may be expressed in a cell under the control of said promoter.

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17. The molecule of claim 16, wherein said coding sequence is heterologous to the promoter.

(10) 18. A host cell comprising the DNA molecule of claim 15.

(11) 19. The host cell of claim 18, wherein said host cell is *E. coli*.

(12) 20. A method for producing a protein, wherein said protein is a mutant Taq DNA polymerase comprising a substitution of Tyr for Phe_{667} of wild-type Taq polymerase, said method comprising:

(a) culturing a host cell comprising the DNA molecule of claim 16, and

(b) isolating said protein from said host cell.

21. A mutant DNA polymerase as claimed in claim 7, wherein said mutant DNA poymerase is a mutant Taq DNA polymerase comprising a substitution of Tyr for Phe_{667} of wild-type Taq DNA polymerase.

22. A DNA molecule as claimed in claim 1, wherein said mutant protein is a mutant Klenow fragment of *E. coli* DNA polymerase I comprising a substitution of Tyr for Phe_{762} of wild-type Klenow fragment DNA polymerase.

23. The DNA molecule of claim 22, further comprising a promoter, wherein said promoter is in a position and orientation with respect to the coding sequence such that the mutant protein may be expressed in a cell under the control of said promoter.

24. The molecule of claim 23, wherein said coding sequence is heterologous to the promoter.

25. A host cell comprising the DNA molecule of claim 22.

26. The host cell of claim 25, wherein said host cell is *E. coli*.

27. A method for producing a protein, wherein said protein is a mutant Klenow fragment of *E. coli* DNA polymerase I comprising a substitution of Tyr for Phe_{762} of wild-type Klenow fragment of *E. coli* DNA polymerase I, said method comprising:

(a) culturing a host cell comprising the DNA molecule of claim 23, and

(b) isolating said protein from said host cell.

28. A mutant DNA polymerase as claimed in claim 7, wherein said mutant DNA polymerase is a mutant Klenow fragment of *E. coli* DNA polymerase I comprising a substitution of Tyr for Phe_{762} of wild-type Klenow fragment of *E. coli* DNA polymerase I.